

DIAGNOSIS OF HAWAIIAN SPECIES OF STENOZYNE (LABIATAE)

Hawaiian Plant Studies 139

Harold St. John
Bishop Museum, Box 19000A, Honolulu, Hawaii, 96817, USA.

A lengthy study by the author of Hawaiian Stenogyne has produced a large manuscript. Since this is not ready to publish, it is logical to print the diagnoses of the new species and varieties, in order to make them available. The types, unless otherwise located, are in the Bishop Museum, Honolulu.

S. acuta sp. nov.

Ramulis puberulis, petioles 5-8 mm longis, laminis 4.5-6 cm longis ellipticis, calycibus 8.5-10.2 mm longis, corollis 21 mm longis pilosis, loba infera 4.5 mm longa, ovata. Typus: Hawaii I., Volcano, F. R. Warshauer 1,938.

S. adpressa sp. nov.

Ramulis pilosulis, petioles 10-17 mm longis pilosis, laminis 2-4 cm longis angustae ellipticis infra pilosulis, nodis 18-22-floriferis, calycibus 10-12 mm longis. Typus: Hawaii I., C. N. Forbes 183.H., in part.

S. adscendens sp. nov.

Ramulis hirsutulis, petiolis 15-30 mm longis hirsutulis, laminis 4-6.5 mm longis ellipticis infra in nervis hirsutis, nodis 2-floriferis, calycibus 5 mm longis, corollis 12 mm longis puberulis, loba infera 1 mm longa ovata. Typus: Hawaii I., L. W. Cuddihy 893.

S. alakaiensis sp. nov.

Ramulis pilosulis, petiolis 6-13 mm longis pilosulis, laminis 3.5-6.5 cm longis lanceolatis, nodis 6- (4)-floriferis, calycibus 9 mm longis puberulis, corollis 26 mm longis puberulis, loba infera 5 mm longa ovata. Typus: Kauai I., R. Gustafson 1,061.

S. alba, sp. nov.

Ramulis pilosulis, petiolis 5-8 mm longis pilosulis, laminis 3.5-4.7 cm longis ellipticis infra pilosulis, nodis 4-6-floriferis, calycibus 9-10 mm longis pilosulis, corollis 15 mm longis pilosulis, loba infera 1.6 mm longa ovata. Typus: Hawaii I., W. Hillebrand 397.

S. albimontis sp. nov.

Ramulis glabris, petiolis 8-15 mm longis ciliatis, laminis 1.5-4.3 cm longis ovatis, glabris, nodis 6-floriferis, calycibus 13 mm longis puberulis, corollis 19 mm longis puberulis, loba infera 3.3 mm longa suborbiculari. Typus: Hawaii I., C. N. Forbes 469.H.

S. alternans sp. nov.

Ramulis cum valleculis alternatis pilosulis, petiolis 5-8 mm longis pilosis, laminis 22-43 mm longis ovatis infra nervis pilosulis, nodis 6-floriferis, calycibus 6-8 mm longis, corollis 17 mm longis, loba infers

3 mm longa, ovata. Typus: Hawaii I., H. McEldowney 19.

S. ambiobtuta sp. nov.

Ramulis pilosulis, petiolis 12-19 mm longis pilosulis, laminis 5-6 cm longis ellipticis infra pilosulis, nodis 6-floriferis, calycibus 10-11 mm longis pilosulis, corollis 18 mm longis pilosulis. Typus: Hawaii I., S. Anderson 489.

S. angularis sp. nov.

Ramulis hirsutis, petiolis 6-20 mm longis hirsutis, laminis 18-40 mm longis ovatis hirsutis, nodis 6-floriferis, calycibus 11-12.5 mm longis hirsutis. Typus: Hawaii I., F. R. Warshauer 1,996.

S. bracteosa sp. nov.

Ramulis pilosulis, petiolis 6-11 mm longis ciliatis, laminis 17-27 mm longis ovatis, glabris, nodis 6-floriferis, calycibus 5.5=6.5 mm longis glabris, corollis 22-23 mm longis pilosulis, loba infera 3.3 mm longa ovata. Typus: Hawaii I., J. Davis 946.

S. calamintoides A. Gray, var. kulanensis, var. nov.

Calycibus 8-9 mm longis puberulis, nodis 8-10-floriferis, ramulis pilosulis, petiolis pilosulis. Typus: Hawaii I., H. St. John 25,320.

S. calvata sp. nov.

Ramulis in lateribus pilosulis, petiolis 3-7 mm longis ciliatis, laminis 1.9-3.9 cm longis ovatis infra in nervis pilosis, nodis 6-floriferis, calycibus 6.5-7 mm longis pilosis, corollis 15.5 mm longis pilosis, loba infera 3 mm longa ovata. Typus: Hawaii I., G. Clarke 109.

S. ciliata sp. nov.

Ramulis pilosulis, petiolis 3-7 mm longis ciliatis, laminis 10-13 mm longis elliptici-ovatis infra pilosulis, nodis 2-floriferis, calycibus 8-8.5 mm longis puberulis, corollis 22 mm longis puberulis, loba infera 3.5 mm diametri suborbiculari. Typus: Hawaii I., H. St. John 26,962.

S. conscandens sp. nov.

Ramulis in angulis pilosis, petiolis 3-7 mm longis ciliatis, laminis 5-10 mm longis ovatis ciliatis, nodis 2-floriferis, calycibus 7.5 mm longis ciliolatis, corollis 18-19 mm longis pilosulis, loba infera 3 mm longa ovata. Typus: Hawaii I., K. M. Nagata 1,689.

S. coriacea sp. nov.

Ramulis glabris, petiolis 6-8 mm longis pilosulis, laminis 28-37 mm longis ellipticis glabris, nodis 3-4-floriferis, calycibus 11-12.5 mm longis puberulis, corollis 13 mm longis. Typus: Hawaii I., C. Wakida 326.

S. Davisae sp. nov.

Ramulis pilosulis, petiolis 6-9 mm longis ciliatis, laminis 18-27 mm longis ovatis glabris, nodis 4-6-floriferis, calycibus 6.5-7 mm longis glabris, corollis

23 mm longispilosus, loba infera 5 mm longa. Typus: Hawaii I., J. Davis 490.

S. decumbens sp. nov.

Ramulis puberulis, petiolis 3-8 mm longis ciliatis, laminis 1.3-2.7 cm longis ellipticis glabris, nodis 6-floriferis, calycibus 7-8 mm longis pilosulis, corollis 12-14 mm longis puberulis, loba infera 3.3 mm longa elliptica. Typus: Hawaii I., H. McEldowney 20.

S. deltoidea sp. nov.

Ramulis hirsutulis, petiolis 7-13 mm longisciliatis, laminis 2-3.8 cm longis ovatis, glabris, nodis 6-floriferis, calycibus 9-10 mm longis; corollis 35 mm longis pilosulis, loba infera 5 mm longa elliptica. Typus: Hawaii I., C. N. Forbes 676.H.

S. diantha sp. nov.

Ramulis pilosulis, petiolis 5-9 mm longis ciliatis, laminis 4.5-5.8 cm longis ellipticis glabris, nodis 2-floriferis, calycibus 9-10 mm longis pilosulis, corollis 20 mm longis pilosulis. Typus: Hawaii I., F. R. Warshauer 1,938.

S. Douglasii sp. nov.

Internodis glabris, petiolis 8-18 mm longis ciliatis, laminis 1.8-6.2 cm longis ellipticis infra in nervis pilosulis, nodis 10-14-floriferis, calycibus 7.5 mm longis puberulis, corollis 16 mm longis puberulis, loba infera 2 mm diametro suborbiculari. Typus: Sandwich Is.

D. Douglas 22 (K).

S. earina sp. nov.

Internodis glabris, petiolis 2-10 mm longis glabris, laminis 25-40 mm longis elliptici-lanceolatis glabris, nodis 3-6-floriferis, calycibus 8.5-9 mm longis puberulis, corollis 17-18 mm longis puberulis, loba infera 1.8 mm longa ovata. Typus: Hawaii I., C. Wakida 325.

S. elliptica sp. nov.

Ramulis hispidulis, petiolis 2-4 mm longis ciliatis, laminis 2.2-3.1 cm longis ovatis infra hispidulis, nodis 2-6-floriferis, calycibus 10-12 mm longis hispidis, corollis 22-28 mm longis hispidulis, loba infera 3-4.5 mm longa ovata vel suborbiculari. Typus: Sandwich Is., D. Nelson (BM).

S. elliptilobata sp. nov.

Nodis 6-floriferis, calycibus 16-17 mm longis pilosulis, corollis 40 mm longis pilosulis, loba infera 5.5 mm longa oblate orbiculari. Typus: Hawaii I., J. Jacobi 360.

S. flava sp. nov.

Ramulis in valleculis alternatis pilosulis, ramis lateribus cum petiolis 6-12 mm longis ciliatis, laminis 2.5-5 cm longis ellipticis infra in nervis pilosulis, nodis 6-floriferis, calycibus 11-12 mm longis pilosulis, corollis 19-20 mm longis pilosulis, loba infera 1.5 mm longa ovata. Typus: Hawaii I. J. Davis 555.

S. Forbesii (Sherff) comb. nov.

S. purpurea H. Mann, var. *Forbesii* Sherff, Am. Journ.

Bot. 21: 701, 1934.

S. fruticosa sp. nov.

Ramulis pilosulis, petiolis 6-7 mm longis ciliatis, laminis 16-26 mm longis lancei-ovatis infra in nervis pilosis, nodis 6-4-floriferis, calycibus 8.5-9 mm longis pilosulis, corollis 15 mm longis pilosulis, loba infera 3 mm longa ovata. Typus: Hawaii I., O. & I. Degener 34,639. (G).

S. fusca sp. nov.

Internodis glabris, petiolis 10-21 mm longis glabris vel puberulis, laminis 4-7 cm longis elliptici-lanceolatis glabris, nodis 6-floriferis, calycibus 6-8 mm longis, sub-glabris, corollis 15 mm longis puberulis, loba infera 2.6 mm longa ovata. Typus: Hawaii I., F. R. Warshauer 3,131.

S. gracilis (Sherff) comb. nov.

S. macrantha Benth., var. *gracilis* Sherff, Bot. Gaz. 96: 140, 1934.

S. hamakuaensis sp. nov.

Ramulis glabris, petiolis 10-22 mm longis ciliatis, laminis 4-6 cm longis ellipticis infra in nervis hirsutis, nodis 8-6-floriferis, calycibus 8-9.5 mm longis puberulis, corollis 26-28 mm longis puberulis, loba infera 7 mm longa ovata. Typus: Hawaii I., W. Hillebrand 344A (K).

S. hawaiiensis sp. nov.

Ramulis glabris, petiolis 9-17 mm longis laminis 4-5.5 cm longis ovatis infra glabris, nodis 6-floriferis, caycibus 13 mm longis puberulis, corollis 32 mm longis pilosis, loba infera 6 mm longa semiorbiculari.

Typus: Hawaii I., J. Remy 377 (P).

S. hemidasys sp. nov.

Lateribus alternatis ramularum pilosis, petiolis 2-3 mm longis ciliatis, laminis 5-11 cm longis ovatis, nodis 2-floriferis, calycibus 6-6.6 mm longis pilosulis, corollis 12-13 mm longis pilosulis, loba infera 2 mm longa ovata. Typus: Hawaii I., S. Anderson 439.

S. hiloensis sp. nov.

Ramulis pilosis, petiolis 7-12 mm longis pilosulis, laminis 2.5-3.7 cm longis ovatis infra puberulis, nodis 10-8-floriferis, calycibus 6-7 mm longis, corollis 34 mm longis puberulis, loba infera 4.5 mm longa reniformi. Typus: Hawaii I., J. Davis 670.

S. Hosakae spl nov.

Herbis glabris, petiolis 8-15 mm longis, laminis 3-5 cm longis, nodis 2-floriferis, calycibus 7.5-8 mm longis, corollis 15-18 mm longis puberulis, loba infera 2.5 mm longa elliptica. Typus: Hawaii I., E. Y. Hosaka 2,221.

S. huluhuluensis sp. nov.

Ramulis pilosis, petiolis 2-4 mm longis pilosulis, laminis 3-7 mm longis ovatis infra pilosulis, nodis 2-floriferis, calycibus 7.5-8 mm longis pilosulis, corollis 20-21 mm longis, loba infera 3 mm longa ovata. Typus: Hawaii I., L. W. Cuddihy 912.

S. humululaensis sp. nov.

Internodis glabris, petiolis 5-25 mm longis, laminis 2-8.5 cm longis ellipticis infra glabris, nodis 6-4-floriferis, calycibus 7.5-9 mm longis ciliatis. Typus: Hawaii I., F. R. Warshauer 3,125.

S. integra sp. nov.

Ramulis glabris, petiolis 0.5-2 mm longis, laminis 2-3.5 cm longis elliptis glabris, nodis 20-floriferis, calycibus 11-12 mm longis puberulis, corollis 20 mm longis pilosulis, Typus: Maui I., C. N. Forbes 2,437.M.

S. kaalae Wawra, var. Obatae var. nov.

Ramulis glabris, petiolis ciliatis, laminis in basi rotundatis, nodis 2-floriferis, calycibus 13 mm longis puberulis. Typus: Oahu I., J. Obata.

S. kaalae Wawra, var. Pearsallii var. nov.

Ramulis glabris, calycibus 9 mm longis glabris. Typus: Oahu I., G. Pearsall.

S. Kamehamehae Wawra, forma albiflora (Sherff) comb. nov. *S. Kamehamehae* Wawra, var. albiflora Sherff, Bot. Gaz. 96: 139, 1934.*S. kauaiensis* sp. nov.

Ramulis pilosis, petiolis 5-9 mm longis pilosis, laminis 4-5.8 cm longis ovatis infra in nervis pilosulis, nodis 6-8-floriferis, calycibus 10-12 mm longis puberulis, corollis 40 mm longis pilosulis, loba infera 7 mm longa ovata. Typus: Hawaii I., J. Davis 662.

S. kilaueae sp. nov.

Ramulis pilosulis, petiolis 8-10 mm longis pilosulis, laminis 3.5-5 cm longis ellipticis infra in nervis pilosulis, calycibus 6-7 mm longis pilosulis, corollis 17 mm longis pilosulis, loba infera 2 mm longa ovata. Typus: Hawaii I., O. Degener 5,456.

S. kipahuluensis sp. nov.

Ramulis pilosis, petiolis 10-23 mm longis pilosis, laminis 2.2-5 cm longis ovatis infra in nervis pilosis, calycibus 12 mm longis puberulis, corollis 5.7 cm longis puberulis, loba infera 7 mm longa semiorbiculari. Typus: Maui I., C. A. Russell 545.

S. konaensis sp. nov.

Ramulis pilosis, petiolis 8-16 mm longis pilosis, laminis 23-40 mm longis ovatis infra pilosulis, nodis 6-4-floriferis, calycibus 7-9 mm longis pilosis, corollis 28-30 mm longis pilosis, loba infera 4-4.5 mm longa ovata. Typus: Hawaii I., F. R. Warshauer 2,011.

S. kukuiensis sp. nov.

Internodis glabris, petiolis 1.5-2.5 mm longis hirsutis, laminis 2.2-2.5 cm longis ellipticis glabris, nodis 2-floriferis, calycibus 12 mm longis hirsutulis, corollis 22 mm longis pilosulis, loba infera 3.3 mm longa rotundate oblonga. Typus: Maui I., R. Hobdy 2,231.

S. kulaensis sp. nov.

Ramulis hirsutis, petiolis 1-2 mm longis hirsutis, laminis 4-7 mm 4-7 mm longis ellipticis hirsutis, nodis 2-floriferis, calycibus 4.3-5 mm longis pilosulis, corollis 16 mm longis pilosis, loba infera 3 mm longa deltoidea. Typus: Maui I., R. Hobdy 2,231.

S. lactea sp. nov.

Ramulis hirsutulis, petiolis 30 mm longis hirsutis, laminis 5.2-8.5 cm longis ovatis infra puberulis, nodis 6-floriferis, calycibus 16-19 mm longis pilosis, corollis 36 mm longis pilosulis, loba infera 6 mm longa orbiculari. Typus: Hawaii I., J. D. Jacobi 360.

S. laculata sp. nov.

Ramulis pilosulis, petiolis 10-25 mm longis ciliatis, laminis 25-55 mm longis ovatis infra pilosulis, nodis 6-4-floriferis, calycibus 6-8 mm longis pilosulis, corollis 23-25 mm longis pilosulis, loba infera 10 mm longa ovata. Typus: Hawaii I., F. R. Warshauer 1,857.

S. laevis sp. nov.

Ramulis glabris, petiolis 7-22 mm longis ciliatis, laminis 5-10.5 cm longis lanceolatis infra midnervo sub-hirsuto, nodis 6-floriferis, calycibus 8-9 mm longis pilosulis, corollis 21 mm longis pilosulis, loba infera 2.5 mm longa subovata. Typus: Hawaii I., H. St. John 18,453.

S. lanceolata sp. nov.

Ramulis puberulis, petiolis 2-5 mm longis ciliatis, laminis 25-27 mm longis lanceolatis glabris, nodis 2-4-floriferis, calycibus 7-8 mm longis puberulis, corollis 16 mm longis pilosulis, loba infera 2 mm longa suborbiculari. Typus: Hawaii I., F. R. Warshauer 3,153.

S. latisepala (Sherff) comb. nov.

S. kaalae Wawra, var. latisepala Sherff, Occas. Papers B. P. Bishop Mus. 20: 16, fig. 7, 1949.

S. leptophylla (Sherff) comb. nov.

S. purpurea H. Mann, var. leptophylla Sherff, Bot. Gaz. 96: 142, 1934.

S. leptophylla (Sherff) St. John, var. retrorsa, var. nov.

Petiolis retrorse pilosulis, laminis infra in nervis pilosulis, calycibus 10-11 mm longis puberulis, labia supera corollae 7 mm longa. Typus: Kauai I., J. F. Rock 5,744.

S. lehuensis sp. nov.

Internodis in linea unica hirsutulis, petiolis 2-4 mm longis hirsutis, laminis 2-3 cm longis ovatis

subglabris, *nodis* 2-floriferis, *calycibus* 11 mm longis *hirsutulis*, *corollis* 22 mm longis *hirsutis*, *loba infera* 4 mm longa *cordata*. Typus: Maui I., R. Hobdy 517.

S. linearis sp. nov.

Ramulis *hirsutis*, petiolis 4-8 mm longis ciliatis, laminis 4.5-10 cm longis lanceolatis *glabris*, nodis 6-floriferis, *calycibus* 10.5-11 mm longis *hirsutulis*, *corollis* 16 mm longis *hirsutis*, *loba infera* 2.5 mm longa suborbiculari. Typus: Kauai I., W. Takeuchi 2,100.

S. longiloba sp. nov.

Ramulis *hirsutulis*, petiolis 5-12 mm longis ciliatis, laminis 3-9.7 cm longis *glabris*, nodis 2-floriferis, *calycibus* 15-17 mm longis *hirsutulis*, *corollis* 10 mm longis *hirsutulis*, *loba infera* 2.5 mm longa ovata. Typus: Hawaii I., J. D. Jacobi 1,104.

S. lutea sp. nov.

Ramulis *glabris*, petiolis 10-17 mm longis *glabris*, laminis 2.5-4.5 cm longis *glabris*, nodis 4-6-floriferis, *calycibus* 9-10.5 mm longis *glabris*, *corollis* 17 mm longis *pilosus*. Typus: Hawaii I., C. N. Forbes 469.H.

S. mananecola sp. nov.

Internodis *glabris*, petiolis 6-12 mm longis ciliatis, laminis 15-25 mm longis *ovatis* *glabris*, nodis 6-floriferis, *calycibus* 6-7 mm longis *pilosulis*, *corollis* 22 mm longis *pilosulis*, *loba infera* 3 mm longa ovata. Typus: Hawaii I., S. Anderson 440.

S. Meeboldii (Sherff) comb. nov.

S. angustifolia A. Gray, var. *Meeboldii* Sherff, Bull. B. P. Bishop Mus. 136: 72, fig. 25, 1935.

S. mollissima (Skottsb.) comb. nov.

S. rugosa Benth., var. *mollis* Sherff, f. *mollissima* Skottsb., Bot. Notis. 1943: 368, 1943.

S. montana sp. nov.

Internodis *glabris*, petiolis 4-9 mm longis ciliatis, laminis 7-18 mm longis ellipticis *glabris*, nodis 2-floriferis, *calycibus* 7-8 mm longis *glabris*, *corollis* 16 mm longis *pilosulis*, *loba infera* 4 mm longa *elliptica*. Typus: Hawaii I., H. McEldowney 1.

S. montideae sp. nov.

Ramulis *glabris*, petiolis 12-25 mm longis *hirsutulis*, laminis 4-6.5 cm longis lanceolatis *infra* in nervis *pilosulis*, nodis 2-4-floriferis, *calyxibus* 7-10 mm longis *pilosulis*. Typus: Hawaii I., Dec. 1955, J. F. Rock.

S. multiflora sp. nov.

Ramis *glabris*, petiolis 5-13 mm. longis ciliatis, laminis 3.5-5.3 cm longis elliptis *glabris*, nodis 10-12-floriferis, *calycibus* 6-10 mm longis *glabris*, *corollis* 18 mm longis *puberulis*, *loba infera* 3 mm longa suborbiculari. Typus: Hawaii I., C. N. Forbes 334.H.

S. oxyodonta (Sherff) comb. nov.

S. calaminthoides A. Gray, var. *oxyodonta* Sherff,
Am. Journ. Bot. 21: 701, 1934.

S. pedunculata sp. nov.

Ramulis glabris, petiolis 10-26 mm longis glabris,
laminis 5-8.6 cm longis glabris lancei-ovatis, nodis
8-20-floriferis, calycibus 9-13 mm longis puberulis.

Typus: Hawaii I., Wailuku R., L. W. Bryan.

S. pilosa sp. nov.

Ramulis pilosis, petiolis 7-15 mm longis pilosis,
laminis 4.3-7.5 cm longis ovatis infra in nervis pilosu-
lis, nodis 8-floriferis, calycibus 9 mm longis pilosis.

Typus: Hawaii I., O. Degener 5,393.

S. pubicostata sp. nov.

Ramulis hirsutulis, petiolis 4-9 mm longis puberulis,
laminis 3.5-6.2 cm longis lanceolatis infra glabris,
nodis 2-floriferis, calycibus 6.5-7 mm longis hirsutulis,
corollis 15-16 mm longis pilosulis, loba infera 2.8 mm
longa ovata. Typus: Hawaii I. F. R. Warshauer 2,000.

S. recta sp. nov.

Ramulis pilosis, petiolis 7-10 mm longis pilosis,
laminis 2/3-3/8 cm longis ovatis infra in nervis pil-
osis, nodis 6-floriferis, calycibus 9-10 mm longis sub-
glabris, corollis 19 mm longis, loba infera 4 mm longa
ovata. Typus: Maui I., P. K. Higashino 9,129.

S. Remyi (Sherff) comb. nov.

S. scrophularioides Benth., var. *Remyi* Sherff,
Bot. Gaz. 96: 740, 1934.

S. repens sp. nov.

Ramulis setosis, petiolis 6-;4 mm longis cil-
iatis, laminis 1.3-2.7 cm longis ovatis glabris, nodis
6-floriferis, calycibus 5.5-6 mm longis subglabris,
corollis 19-21 mm longis pilosulis, loba infera 4.5-5
mm longa elliptica. Typus: Hawaii I., J. F. Rock
8,314 (A).

S. retrorsa sp. nov.

Ramu;is pilosis, petiolis 7-9 mm longis pilosis,
laminis 15-25 mm longis ovatis infra in nervis pilosulis,
nodis 6-floriferis, calycibus 7-8.5 mm longis pilo-
ulis, corollis 23-25 mm longis pilosulis, loba infera
4.5 mm longa ovata. Typus: Maui I., F. R. Warshauer
2,543.

S. rhuakos sp. nov.

Ramulis pilosulis, petiolis 5-14 mm longis glabris,
laminis 17-34 mm longis ovatis infra in nervis pilosulis,
nodis 2-floriferis, calycibus 8-10 mm longis pilosulis,
corollis 8.5 mm longis pilosulis, loba infera 3 mm longa
ovata. Typus: Hawaii I. U. S. Exped., sheet 57,505.

S. nahukuensis sp. nov.

Ramulis pilosulis, petiolis 7-12 mm longis ciliatis, laminis 23-40 mm longis ovatis infra in nervis hirsutulis, nodis 6-floriferis, calycibus 6-9 mm longis puberulis, corollis 22-26 mm longis puberulis, loba infera 3.5 mm longa ovata. Typus: Maui I., F. R. Warshauer 2,530.

S. nigra sp. nov.

Ramulis hirsutis, petiolis 6-10 mm longis ciliatis, laminis 20-30 mm longis ovatis glabris, nodis 8-14-floriferis, calycibus 5-6 mm longis glabris, corollis 17-18 mm longis pilosulis, loba infera 3 mm longa suborbiculari. Typus: Hawaii I., J. Davis 404.

S. novalimontis sp. nov.

Ramulis hirsutulis, petiolis 7-14 mm longis ciliatis, laminis 2-3.7 cm longis ovatis infra puberulis, nodis 6-floriferis, calycibus 6-7 mm longis glabris. Typus: Hawaii I., F. R. Warshauer 1,415.

S. oblonga (Sherff) comb. nov.

S. rotundifolia A. Gray, var. oblonga Sherff, Am. Journ. Bot. 21: 701, 1934.

S. ohiascandens sp. nov.

Internodis glabris, petiolis 7-17 mm longis glabris, laminis 11-32 mm longis ovatis glabris, nodis 2-4-floriferis, calycibus 5-6 mm longis glabris, corollis 14 mm longis, loba infera 1.5 mm longa suborbiculari. Typus: Hawaii I., N. Balakrishnan 931.

S. olaensis sp. nov.

Ramulis pilosulis, petiolis 10-23 mm longis ciliatis, laminis 3-8 cm longis ovatis infra in nervis pilosulis, nodis 6floriferis, calycibus 7-8 mm longis pilosulis. Typus: Hawaii I., N. Balakrishnan 773.

S. olowaluensis sp. nov.

Ramulis glabris, petiolis 2-5 mm longis glabris, laminis 1.7-4.8 cm longis ovatis glabris, nodis 2-6-floriferis, calycibus 6-8 mm longis puberulis, corollis 19 mm longis pilosulis, loba infera 4 mm longa suborbiculari. Typus: Maui I., C. N. Forbes 2,436.M.

S. oonoides sp. nov.

Ramulis pilosulis, petiolis 8-12 mm longis pilosis, laminis 3-5.5 cm longis ovatis infra in nervis puberulis, nodis 3-floriferis, calycibus 8-9 mm longis pilosulis, corollis 23-25 mm longis pilosulis, loba infera 4-4.5 mm in diametro suborbiculari. Typus: Hawaii I., Kona, F. R. Warshauer.

S. ovata sp. nov.

Ramulis pilosulis, petiolis 10-17 mm longis ciliatis, laminis 3-4.3 cm longis ellipticis infra puberulis, nodis 6-floriferis, calycibus 10-13 mm longis puberulis, corollis 35 mm longis pilosulis. Typus: Hawaii I., O. & I. Degener 27,557.

S. Rockii sp. nov.

Ramulis hirsutulis, petiolis 6-18 mm longis hirsutulis, laminis 1.5-3.7 cm longis ellipticis infra in nervis hirsutulis, nodis 6-floriferis, calycibus 10-11 mm longis glabris, corollis 32-37 mm longis pilosulis, loba infera 3 mm longa transverse elliptica. Typus: Hawaii I., J. F. Rock 8,307.

S. rotundifolia A. Gray, var. *salebrosa* var. nov.

Ramulis in angulis retrorse villosis, petiolis 5-14 mm longis villosis, nodis 6-floriferis, calycibus 6-8 mm longis pilosulis, corollis 22 mm longis pilosis, loba infera 4 mm longa ovata. Typus: Maui I., C. N. Forbes 1,114.M.

S. rubra sp. nov.

Ramulis puberulis, petiolis 8-15 mm longis, laminis 0.8-3.2 cm longis glabris, nodis 6- (4)-floriferis, calycibus 9-10 mm longis, corollis 36 mm longis pilosulis, loba infera 6 mm longa suborbiculari. Typus: Hawaii I., G. E. Olson 1,099.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John, var. *subulata*.

S. rugosa Benth., var. *subulata* Sherff, Bot. Gaz. 96: 142, 1934.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John, var. *imberbis* var. nov.

Ramis glabris, petiolis 12-19 mm longis, laminis 4-7 cm longis lancei-ovatis glabris, nodis 4-6-floriferis, calycibus 11-12 mm longis glabris, corollis 18 mm longis, loba infera 3.5 mm longa elliptici-oblonga. Typus: Hawaii I., E. Bailey.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John, var. *monticola* var. nov.

Ramis glabris, petiolis 12-14 mm longis, laminis 2.2-7 cm longis lanceolatis varie ovatis glabris, nodis 8-12-floriferis, calycibus 9 mm longis pilosulis, corollis 17-18 mm longis. Typus: Hawaii I., ESP 038.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John, var. *pubens* var. nov.

Internodis glabris, petiolis 6-15 mm longis ciliatis, laminis 3.5-7.5 cm longis lanceolatis glabris, nodis 4-6-floriferis, calycibus 10-12 mm longis hirsutulis, corollis 15-17 mm longis, loba infera 2 mm longa elliptica. Typus: Hawaii I., G. O. Fagerlund. 15.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John, var. *pubinervis* var. nov.

Internodis glabris, petiolis 10-18 mm longis hirsutis, laminis 3-9 cm longis lanceolatis infra in nervis hirsutulis, nodis 4-6-floriferis, calycibus 10-12 mm longis hirsutulis, corollis 18 mm longis puberulis. Typus: Hawaii I., G. O. Fagerlund 1,063.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John,
var. *punaensis* var. nov.

Internodis hirsutulis, laminis 3-4.5 cm longis ellipticis infra puberulis, nodis 4-6-floriferis, calycibus 8-9 mm longis hirsutulis, corollis 19 mm longis hirsutulis, loba infera 2 mm longa elliptica. Typus: Hawaii I., Wilkes Expedition, sheet 57,704.

S. rugosa Benth., subsp. *subulata* (Sherff) St. John,
var. *remota* var. nov.

Petioles 13-25 mm longis ciliatis, laminis infra in nervis puberulis, nodis 4-floriferis. Typus: Hawaii I., W. Gagne 614.

S. semipilosa sp. nov.

Ramulis in valleculis alternatis pilosulis, petiolis 3-6 mm longis ciliatis, laminis 15-20 mm longis bavatis infra midnervo pilosulo, nodis 6-floriferis, calycibus 7-10 mm longis pilosulis, corollis 17 mm longis puberulis, loba infera 2.7 mm longa ovata. Typus: Hawaii I., K. M. Nagata 1,709.

S. septentrionalis sp. nov.

Ramulis pilosis, petiolis 5-7 mm longis pilosis, laminis 4.2-5 cm longis ellipticis infra pilosis, nodis 6-floriferis, calycibus 8-11 mm longis pilosulis, corollis 22 mm longis pilosulis, loba infera 3.3 mm diametro suborbiculari. Typus: Hawaii I. F. R. Warshauer 1,830.

S. serrata sp. nov.

Internodis glabris, petiolis 1-2.4 mm longis ciliatis, laminis 2.5-10 cm longis ellipticis infra in nervis pilosulis, nodis 10-floriferis, calycibus 9-11 mm longis pilosulis, corollis 15 mm longis pilosulis, loba infera 1.5 mm longa ovata. Typus: Hawaii I., L. W. Cuddihy 871.

S. serrulata sp. nov.

Laminis 3-6 cm longis ovatis, calycibus 15-17 mm longis lobis serratis, corollis 28 mm longis. Typus: Hawaii I., H. St. John 26,818.

S. sessilis Benth., var. *hanaulaensis* var. nov.

Internodis glabris, petiolis 1.5-3 mm longis ciliatis, laminis 2-3.5 cm longis ovatis glabris, nodis 2-floriferis, calycibus 11-12 mm longis puberulis, corollis 21 mm longis pilosulis, loba infera 4 mm longa suborbiculari. Typus: Maui I., R. Hobdy 1,256.

S. sessilis Benth., var. *lanceolata* var. nov.

Laminis ovatis acutis, lobis calycis plus minusve serrulatis lanceolatis. Typus: Hawaii I., D. Herbst 2,004.

S. sessilis Benth., var. *pilosa* var. nov.

Caulibus foliisque pilosis, pedicellis calycisque pilosulis, calycibus 11 mm longis, lobis inferis 4-5 mm longis lanceolatis. Typus: Hawaii I., Papaloa, O. Degener.

S. sessilis Benth., var. *wailukuensis* var. nov.

Herbis glabris, petiolis 2-4 mm longis, laminis 2-3.3 cm longis ovatis, nodis 2-floriferis, calycibus 11-12 mm longis puberulis, corollis 20 mm longis puberulis.

Typus: Maui I., C. N. Forbes 2,437.M.

S. subsessilis sp. nov.

Ramulis in valleculis pilosis, petiolis 1-1.5 mm longis ciliatis, laminis 2.5-7 cm longis ovatis glabris, nodis 2-floriferis, calycibus 17-19.5 mm longis pilosis, corollis 30 mm longis pilosulis, loba infera 3.5 mm longa suborbiculari. Typus: Maui I., C. N. Forbes 2,351.M.

S. teres sp. nov.

Ramulis pilosis, petiolis 10-17 mm longis pilosis, laminis 4.2-6.2 cm longis ellipticis pilosis, nodis 6-floriferis, calycibus 12 mm longis pilosis, corollis 40 mm longis pilosulis, loba infera 7 mm longa reniformi. Typus: Hawaii I., S. Anderson 481.

S. triangularis sp. nov.

Ramulis pilosis, petiolis 7-12 mm longis pilosis, laminis 2.4-4 cm longis ovatis infra in nervis pilosulis, nodis 6-floriferis, calycibus 8-9.5 mm longis puberulis, corollis 30 mm longis pilosis, loba infera 5 mm longa suborbiculari. Typus: Maui I., P. K. Higashino 9,129.

S. villosa sp. nov.

Ramulis villosis, petiolis 15-23 mm longis villosis, laminis 5.7-7.3 cm longis ovatis villosis, nodis 4-floriferis, calycibus 16 mm longis villosis, corollis 33 mm longis pilosulis, loba infera 4.5 mm longa reniformi. Typus: Hawaii I., J. Davis 666.

S. viridialba sp. nov.

Ramulis pilosulis, petiolis 4-12 mm longis ciliatis, laminis 1.6-3.9 cm longis ovatis infra midnervo hirsutulo, nodis 8-floriferis, calycibus 4-4.5 mm longis ciliatis, corollis 14-16 mm longis pilosis, loba infera 3 mm diametro suborbiculari. Typus: Hawaii I., F. R. Warshauer 295.

S. volanica sp. nov.

Ramulis hirsutis, petiolis 7-16 mm longis ciliatis, laminis 1.5-3.4 cm longis ovatis glabris, nodis 4-floriferis, calycibus 4.5-5 mm longis glabris, corollis 24-25 mm longis pilosis, loba infera 3 mm longa ovata. Typus: Hawaii I., Jacobi 386.

S. waimeana (Sherff) comb. nov.

S. calamithoides A. Gray, var. *waimeana* Sherff.

Am. Journ. Bot. 21: 701, 1934.

S. Warshaueri sp. nov.

Ramulis pilosulis, petiolis 18-45 mm longis puberulis, laminis 6-8.5 cm longis ovatis infra puberulis, nodis 6-floriferis, calycibus 6-7 mm longis pilosulis,

corollis 22-25 mm longis pilosulis, loba infera 4-4.5 mm
longa elliptica. Typus: Hawaii I., F. R. Warshauer 1,972.

S. Wilkesii (Sherff) comb. nov.

S. sessilis Benth., var. *Wilkesii* Sherff, Bull. B.
P. Bishop Mus. 136: 87, fig. 34, 1935.